# STATE OF HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES OFFICE OF CONSERVATION AND COASTAL LANDS Honolulu, Hawai'i

Board of Land and Natural Resources Department of Land and Natural Resources State of Hawai'i Honolulu, Hawai'i FILE NO.: CDUA OA-3431

REF: OCCL: MC

Acceptance Date: July 23, 2007 180 Exp. Date: January 19, 2008

December 14, 2007

**REGARDING:** 

Erosion Control Wall (After-the-Fact)

APPLICANT:

Read Spencer

881 'Akumu Place, Kailua, HI 96734

AGENT:

same

LANDOWNER:

Mr. Spencer (part); City and County of Honolulu (part)

LOCATION:

Ka'elepulu Stream, Kailua, Ko'olaupoko, O'ahu

TMK:

(1) 4-2-50:75 (Spencer); 4-2-49:87 (City and County)

AREA OF USE:

400 square feet

SUBZONE:

Resource

#### **DESCRIPTION OF AREA AND CURRENT USE:**

The project site is on the west bank of Ka'elepulu Stream, immediately south and upstream of the Keolu Drive Bridge in Kailua, O'ahu (Exhibit 1). The majority of the project is on private property; however, part of it has encroached onto City and County property. The privately owned parcel (1) 4-2-50:75 is not in the Conservation District. The county-owned parcel (1) 4-2-49:87 comprises an approximately 110-meter long stretch of the waters and banks of Ka'elepulu Stream and is in the General Subzone of the State Land Use Conservation District. **Exhibit 1** shows the location of the two parcels.

The Ka'elepulu watershed covers 3450 acres, and is part of the larger Ko'olaupoko watershed. Hawaiian agriculturalists developed a network of lo'i kalo, inland fishponds, and irrigation systems out of the natural wetlands. Later rice farmers built the Ka'elepulu Canal to control water from the marshes to their fields. The canal runs from the 80-acre

### **Board of Land and Natural Resources**

Ka'elepulu Pond (a.k.a. Enchanted Lake) to Kailua Bay. The project area is at the upper reaches of the canal, approximately 400 meters from where it exits the pond.

The area has since become heavily urbanized, and agriculture uses have largely vanished. The canal itself is almost completely hardened. Seawalls line the majority of the parcels on the upper portions of the stream. Non-hardened areas are dominated by mudflats and invasive species such as mangrove (*Rhizophora mangle*) and haole koa (*Leucaena leucocephala*).

Ka'elepulu Stream is listed on Hawai'i's 303(d) list of impaired waters due to turbidity, nutrients, bacteria, and chlorophyll pollution. Sources of these contaminants include storm water runoff, septic tanks/cesspools, sanitary sewer overflows, domestic and wild animals, along with lake bed and water column processes.

There is limited recreational use of the waters. The area immediately fronting the parcel is a popular turn-around area for outrigger canoe paddlers. Residents also fish and lay crab traps from the bridge just to the north of the parcel.

#### **VIOLATIONS**

On October 24, 2006 the City and County of Honolulu Department of Planning and Permitting notified the Office of Conservation and Coastal Lands (OCCL) that Mr. Read Spencer had conducted unauthorized repairs and reconstruction on a city-owned seawall at the back of his property along Ka'elepulu Stream, TMK (1) 4-2-50:75.

Mr. Read Spencer had begun repairs on a deteriorated rock wall bordering his property in November of 2005. He cleared out mangrove and haole koa that had grown over the old wall, removed debris, and constructed a 30-inch high by 100-foot long split-level rock wall. The City and County found that the wall encroached onto the public right of way at the rear of the property, and served Mr. Read a Notice of Violation and Order on November 16, 2005.

Mr. Spencer worked out an encroachment agreement with the City and County Department of Facilities Maintenance (DFM) on October 6, 2006. This agreement allowed the wall to remain, and placed the responsibility of maintaining the wall on the property owner. At the same time DFM notified Mr. Spencer that he needed to also secure any appropriate permits from OCCL.

The City and County notified OCCL of the project, and OCCL opened a violation case [ref. OA-07-35] on December 28, 2006. Mr. Spencer chose to resolve the violation through the Hearing Officer/Administrative Procedure System (HOAPS). A condition of using the HOAPS system was that Mr. Spencer pursue an after-the-fact permit for the project.

The subject case was processed through HOAPS and disposed of on March 14, 2007. Securing this permit will resolve the violation.

#### **PROPOSED USE:**

Mr. Spencer is seeking a permit for the completed work, to conduct on-going maintenance of the wall, to continue to remove mangrove and other invasive species by hand, and to complete the unfinished south section of the wall.

The parcel had been previously landscaped. An existing rock wall was crumbling. Mr. Spencer removed a flight of concrete stairs, cleared debris from the failed wall, and removed mangrove saplings that had grown in the muck. He then constructed a split-level 100 foot rock wall along 100 feet of the property. The top tier is 1'4" wide by 2'3" tall, and the bottom tier 2'10" wide by 4'3" tall, with approximately 12" below grade. A gravel drain runs behind the top tier. **Exhibit 2** shows the wall in cross section.

The existing grade was maintained at both the upper and lower levels. The lower tier of the rock wall extends a couple of inches outwards from where the previous wall did. An approximately 20-foot section of the southern portion of the wall has not been completed.

Exhibit 3 shows the plot plan of the parcels prior to the work, and Exhibit 4 the project location.

OCCL reviewed the project, and conducted a Site Visit on January 9, 2007. Photos taken on that visit show a split-level rock wall (**Exhibit 5**), the northern end of the rock wall, at the Ke'olu Drive Bridge (**Exhibit 6**), and an unfinished section at the southern end of the property showing the condition of the old wall (**Exhibit 7**).

#### **SUMMARY OF COMMENTS:**

The application was referred to the following agencies for their review and comment: the State: Department of Land and Natural Resources (DLNR) - O'ahu District Land Office, Division of Aquatic Resources, Historic Preservation Division, and the Commission on Water Resource Management; the Office of Hawaiian Affairs; the City and County Department of Facilities and Maintenance; the Kuli'ou'ou-Kailua Neighborhood Board No. 30; the Kāne'ohe Neighborhood Board No. 30; and the Department of Health Office of Environmental Quality Control. A copy of the application was also available for review at the Kāne'ohe Regional Library..

Notice of the application was published in the August 8, 2007 issue of the Office of Environmental Quality Control (OEQC)'s *Environmental Notice*.

Comments were received from the following agencies and are summarized as follows:

#### Division of Aquatic Resources (DAR)

DAR does not condone the submission of after-the-fact permits, and notes that DAR has not conducted any biological surveys in Ke'elepulu Stream.

Since the project has been completed, DAR does not believe it poses any further impact to aquatic resources in the area. Given that the applicant proposes to conduct on-going maintenance, DAR recommends that:

- the landowner cover areas that have been denuded of invasive vegetation as quickly as possible in order to prevent erosion, and that the cleared vegetation be disposed of off-site;
- the landowner prevent materials, petroleum products, debris, and green waste from entering into the aquatic environment<sup>1</sup>.

#### Applicant's Response

The applicant notes that one of the reasons for repairing the failed wall was to prevent erosion that was occurring. During construction the applicant installed a temporary barrier made of lumber and 6 ml visqueen to minimize erosion and runoff.

The main goal was to protect the stream from sedimentation. Landscaping along the wall will also reduce runoff. The applicant will adhere to DAR suggestions in completing the remainder of the wall.

#### **DLNR** Land Division

No comments

#### Commission on Water Resource Management (CWRM)

CWRM states that a stream channel alteration permit (SCAP) will not be needed.

#### Office of Hawaiian Affairs (OHA)

OHA states that they are concerned by after-the-fact permits, that the rock wall encroached on the public right-of-way, and that any encroachment onto "property held in trust for the public is a detriment to Hawai'i citizens as a whole."

OHA states that the property is "in the P-1 subzone Conservation District" (sic) and notes the objectives of the Protective Subzone<sup>2</sup>. OHA concludes that this area is protected because it is environmentally sensitive.

OHA notes that Ka'elepulu is a navigable waterway and that jurisdictional determinations should be made to determine compliance with the Army Corps of Engineers and the Clean Water Act.

OCCL will recommend that these be conditions of granting the permit

<sup>&</sup>lt;sup>2</sup> OCCL notes that Ka'elepulu is in the General Subzone.

OHA notes that the applicant removed vegetation. OHA states that this will lead to sediments that were once held in place running into the near shore environment.

OHA suggest that the project area be landscaped with native or indigenous species, by hand, to further the traditional Hawaiian concept of *mālama `āina* and to create a more Hawaiian sense of place.

#### Applicant's Response

The applicant notes that one of the reasons for repairing the failed wall was to prevent erosion that was occurring. During construction the applicant installed a temporary barrier made of lumber and 6 ml visqueen to minimize erosion and runoff.

The mangroves that were removed were an invasive species with a negative impact on the environment in that they cut off water circulation and trap sediment and debris. There have been federally-funded mangrove removal projects in the area; this one was done at personal expense.

The improvements to the rock wall opened up more of the canal, enhancing the ability of recreational activities such as fishing, crabbing, and paddling.

The applicant will take the recommendations to use native plants for landscaping into consideration.

#### **ANALYSIS:**

After reviewing the application, the Department notified the applicant:

- 1. That the rock wall is an identified land use in the Conservation District pursuant to Hawai'i Administrative Rules (HAR) §13-5-23 Identified land uses in the limited subzone, L-3 EROSION CONTROL, (D-1) Erosion control. flood control, and other hazard prevention devices or facilities; that this use required a Board Permit; and that the final decision as to whether to grant or deny the permit lay with the Board of the Department of Land and Natural Resources.
- 2. That, pursuant to HAR §13-5-40 *Hearings*, a public hearing would not be required.
- 3. That this project was exempt from conducting an Environmental Assessment pursuant to HAR §11-200-8-4 Minor alterations in the conditions of land, water, or vegetation.

#### **SECTION 13-5-30 CRITERIA:**

The following discussion evaluates the merits of the proposed land use by applying the criteria established in Hawai'i Administrative Rules (HAR). § 13-5-30.

1. The proposed land use is consistent with the purpose of the Conservation District.

The purpose of the Conservation district is to regulate land uses for the purpose of conserving, protecting, and preserving the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare.

Staff is of the opinion that this rock wall is a sustainable use.

2. The proposed land use is consistent with the objectives of the subzone of the land on which the use will occur.

The objective of the Resource subzone is to designate open space where specific conservation uses may not be defined, but where urban use would be premature.

Staff believes that this project will preserve open space.

3. The proposed land use complies with provisions and guidelines contained in Chapter 205, HRS, entitled "Coastal Zone Management," where applicable.

This area is not in the Special Management Area. Sedimentation is a recurring problem in Ka'elepulu Stream, and the channel mouth is often blocked. OCCL believes that, if this project does reduce runoff and sedimentation, it will be beneficial to the health of the coastal area downstream.

4. The proposed land use will not cause substantial adverse impacts to existing natural resources within the surrounding area, community, or region.

Ka'elepulu Stream is a man-made canal in an urban area. It is listed as a threatened waterway. The rock wall should not cause any additional adverse impacts.

5. The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding area, appropriate to the physical conditions and capabilities of the specific parcel or parcels.

The neighboring parcels, less one, have all constructed rock walls along Ka'elepulu Stream. This one is similar in design and scope.

6. The existing physical and environmental aspect of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, which ever is applicable.

The rock wall will open up this part of the canal, making it more conducive to recreational activities such as paddling, crabbing, and fishing.

7. Subdivision of the land will not be utilized to increase the intensity of land uses in the Conservation District.

No subdivision of land is proposed.

8. The proposed land use will not be materially detrimental to the public health, safety and welfare.

It is staff's opinion that the proposed project will not be detrimental to the public health, safety and welfare.

#### **DISCUSSION:**

Ka'elepulu Stream is a man-made canal through an urbanized area of Kailua. The original canal might have followed irrigation routes developed by Hawaiians for *lo'i kalo* and inland fishponds; however, residential and commercial development has completely replaced agriculture along the stream.

Much of the stream is lined with rock walls. A site visit to the area by OCCL showed that parcels without rock walls were marked by muddy flats dominated by invasive species, particularly mangrove and haole koa.

An existing rock wall along Mr. Spencer's parcel had failed. Photos show that the land was eroding into the stream. Mr. Spencer began building a new wall without first securing the proper County and State permits. A portion of the wall was found to be encroaching onto County owned land.

Mr. Spencer worked out an agreement with the County that would allow the wall to remain, pending approval by DLNR, and which placed the responsibility of maintaining the wall on the property owner.

OCCL opened a violation case against Mr. Spencer. The violation was resolved through HOAPS. A final condition of the HOAPS agreement was that Mr. Spencer secure an after-the-fact permit for the project.

The wall is similar in size and style to others along this stretch of the canal. Ka'elepulu is a severely damaged waterway, and OCCL is of the opinion that this wall will not cause further harm.

The stream is only appropriate for a limited number of recreational uses, namely crabbing, fishing, and paddling. OCCL does not believe that the wall will have an impact on crabbing and fishing, and that it will improve paddling conditions by decreasing sedimentation and opening up the area for canoes to turn around in.

OCCL is not aware of any public right-of-way along City owned canals. There is a sewer easement on the northern border of the parcel that was not affected by this project.

Only the stream itself is in the Conservation District; OCCL does not have jurisdiction over land uses and landscaping on the residential side of the wall.

#### **RECOMMENDATION:**

Based on the preceding analysis, staff recommends that the Board of Land and Natural Resources APPROVE an after-the-fact permit for the rock wall, the completion of the southern portion of the wall, and on-going maintenance of the wall, at 881 'Akumu Place, Kailua, TMK (1) 4-2-50:75 and 4-2-49:87, subject to the following conditions:

- 1) The applicant shall comply with all applicable statutes ordinances, rules, and regulations of the Federal, State and County governments, and the applicable parts of Section 13-5-42, Hawai'i Administrative Rules;
- 2) The applicant, their successors and assigns, shall indemnify and hold the State of Hawai'i harmless from and against any loss, liability, claim or demand for property damage, personal injury or death arising out of any act or omission of the applicant, their successors, assigns, officers, employees, contractors and agents under this permit or relating to or connected with the granting of this permit;
- 3) The applicant shall comply with all applicable Department of Health administrative rules;
- 4) All mitigation measures set forth in the application materials, and in the final environmental assessment for this project are hereby incorporated as conditions of the permit;
- 5) Any work done on the land shall be initiated within one year of the approval of such use, and unless otherwise authorized be completed within three years of the approval. The applicant shall notify the Department in writing when construction activity is initiated and when it is completed;
- 6) In issuing this permit, the Department has relied on the information and data that the applicant has provided in connection with this permit application. If, subsequent to the issuance of this permit, such information and data prove to be false, incomplete or inaccurate, this permit may be modified, suspended or revoked, in whole or in part, and/or the Department may, in addition, institute appropriate legal proceedings;
- 7) Should historic remains such as artifacts, burials or concentration of charcoal be encountered during construction activities, work shall cease immediately in the vicinity of the find, and the find shall be protected from further damage. The contractor shall immediately contact SHPD (692-8015), which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary;
- 8) The applicant acknowledges that the approved work shall not hamper, impede or otherwise limit the exercise of traditional, customary or religious practices in the

immediate area, to the extent such practices are provided for by the Constitution of the State of Hawai'i, and by Hawai'i statutory and case law;

- 9) During construction, appropriate mitigation measures shall be implemented to minimize impacts to the marine environment, off-site roadways, utilities, and public facilities;
- 10) Where any interference, nuisance, or harm may be caused, or hazard established by the use, the applicant shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard;
- 11) The applicant understands and agrees that this permit does not convey any vested rights or exclusive privilege;
- 12) The applicant shall provide documentation (e.g., book and page, or document number) that the permit approval has been placed in recordable form as a part of a deed instrument;
- 13) During maintenance and repair work, and during construction of the remaining portion, the landowner will cover areas that have been denuded of invasive vegetation as quickly as possible in order to prevent erosion, and will dispose of the cleared vegetation off-site;
- 14) During maintenance and repair work, and during construction of the remaining portion, the landowner will prevent materials, petroleum products, debris, and green waste from entering into the aquatic environment.
- 15) Other terms and conditions as may be prescribed by the Chairperson; and
- 16) Failure to comply with any of these conditions shall render this Conservation District Use Permit null and void.

Respectfully submitted,

Michael Cain

Staff Planner

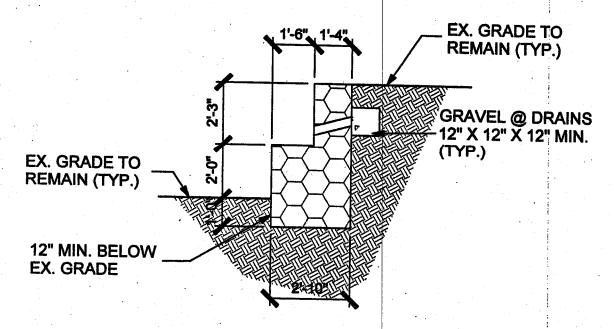
Approved for submittal

Laura H. Thielen, Chairperson

Board of Land and Natural Resources

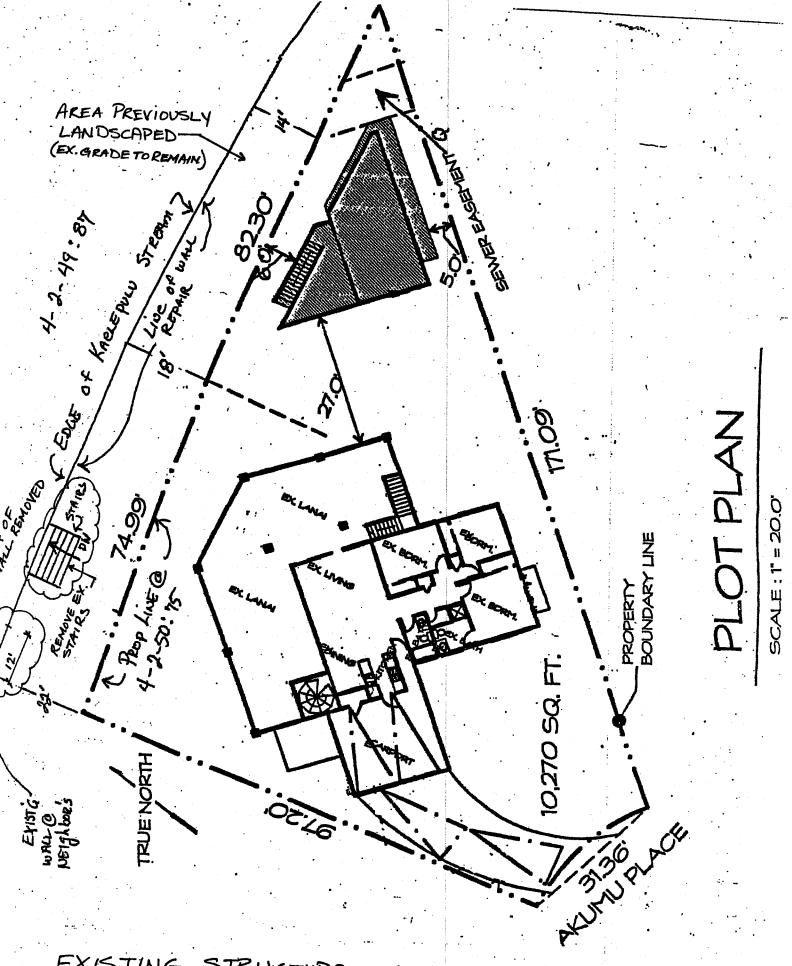
TMK (1) 4-2-50:75 (Private); 4-2-49:87 (City and County)

Ka'elepulu Stream (por)



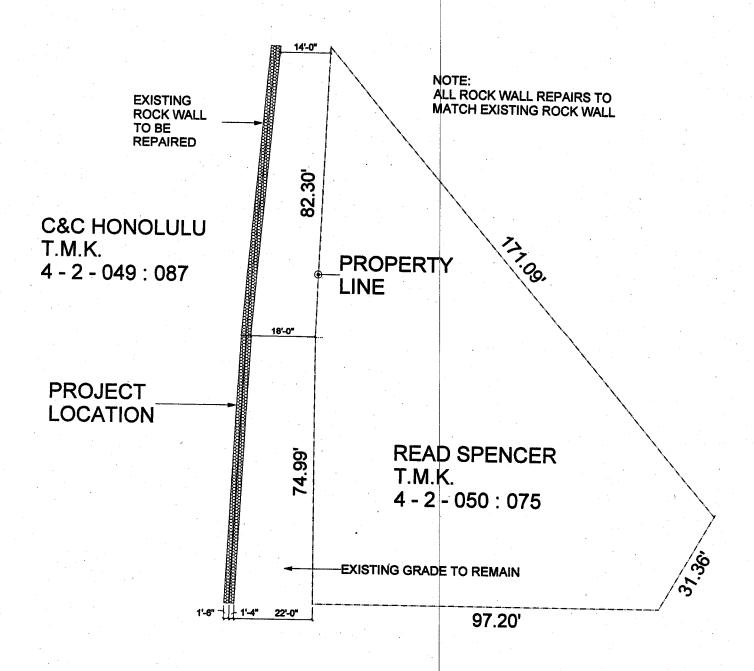
# ROCK WALL SECTION

SCALE: N.T.S.



EXISTING STRUCTURES AND STRUCTURES TO BE REMOVED

**EXHIBIT** 3



## **ROCK WALL PLAN**

SCALE: N.T.S.





